

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

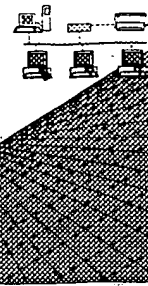
Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

---



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

**BEST AVAILABLE COPY**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/647,309

Source: OIPF

Date Processed by STIC: 12/6/2001

RECEIVED  
JAN 08 2002  
TECH CENTER 1600/2900

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

**Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

Does Not Comply  
Corrected Diskette Needed

1-12

3 <110> APPLICANT: Pierre Fabre Medicament  
 5 <120> TITLE OF INVENTION: USE OF ACTIVE P40 CONJUGATES FOR NASAL DELIVERY  
 7 <130> FILE REFERENCE: D17064  
 9 <140> CURRENT APPLICATION NUMBER: US/09/647,309  
 10 <141> CURRENT FILING DATE: 2001-11-30  
 12 <150> PRIOR APPLICATION NUMBER: FR 98 03814  
 13 <151> PRIOR FILING DATE: 1998-03-27  
 15 <160> NUMBER OF SEQ ID NOS: 136  
 17 <170> SOFTWARE: PatentIn Vers. 2.0

RECEIVED  
 JAN 08 2002  
 TECH CENTER 1600/2900

## ERRORED SEQUENCES

19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 1032  
 E--> 21 <212> TYPE: ADN DNA (see 1.823 of Sequence Rules)  
 22 <213> ORGANISM: Klebsiella pneumoniae  
 24 <220> FEATURE:  
 25 <221> NAME/KEY: CDS  
 26 <222> LOCATION: (1)..(1032)  
 27 <223> OTHER INFORMATION: rp40  
 29 <400> SEQUENCE: 1

30	atg aaa gca att ttc gta ctg aat gcg gct ccg aaa gat aac acc tgg	48
31	Met Lys Ala Ile Phe Val Leu Asn Ala Ala Pro Lys Asp Asn Thr Trp	
32	1 5 10 15	
34	tat gca ggt ggt aaa ctg ggt tgg tcc cag tat cac gac acc ggt ttc	96
35	Tyr Ala Gly Gly Lys Leu Gly Trp Ser Gln Tyr His Asp Thr Gly Phe	
36	20 25 30	
38	tac ggt aac ggt ttc cag aac aac aac ggt ccg acc cgt aac gat cag	144
39	Tyr Gly Asn Gly Phe Gln Asn Asn Asn Gly Pro Thr Arg Asn Asp Gln	
40	35 40 45	
42	ctt ggt gct ggt gcg ttc ggt ggt tac cag gtt aac ccg tac ctc ggt	192
43	Leu Gly Ala Gly Ala Phe Gly Gly Tyr Gln Val Asn Pro Tyr Leu Gly	
44	50 55 60	
46	ttc gaa atg ggt tat gac tgg ctg ggc cgt atg gca tat aaa ggc agc	240
47	Phe Glu Met Gly Tyr Asp Trp Leu Gly Arg Met Ala Tyr Lys Gly Ser	
48	65 70 75 80	
50	ggt gac aac ggt gct ttc aaa gct cag ggc gtt cag ctg acc gct aaa	288
51	Val Asp Asn Gly Ala Phe Lys Ala Gln Gly Val Gln Leu Thr Ala Lys	
52	85 90 95	
54	ctg ggt tac ccg atc act gac gat ctg gac atc tac acc cgt ctg ggc	336
55	Leu Gly Tyr Pro Ile Thr Asp Asp Leu Asp Ile Tyr Thr Arg Leu Gly	
56	100 105 110	
58	ggc atg gtt tgg cgc gct gac tcc aaa ggc aac tac gct tct acc ggc	384
59	Gly Met Val Trp Arg Ala Asp Ser Lys Gly Asn Tyr Ala Ser Thr Gly	
60	115 120 125	
62	ggt tcc cgt agc gaa cac gac act ggc gtt tcc cca gta ttt gct ggc	432

## RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/647,309

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

63 Val Ser Arg Ser Glu His Asp Thr Gly Val Ser Pro Val Phe Ala Gly
64      130                      135                      140
66 ggc gta gag tgg gct gtt act cgt gac atc gct acc cgt ctg gaa tac      480
67 Gly Val Glu Trp Ala Val Thr Arg Asp Ile Ala Thr Arg Leu Glu Tyr
68 145                      150                      155                      160
70 cag tgg gtt aac aac atc ggc gac gcg ggc act gtg ggt acc cgt cct      528
71 Gln Trp Val Asn Asn Ile Gly Asp Ala Gly Thr Val Gly Thr Arg Pro
72                      165                      170                      175
74 gat aac ggc atg ctg agc ctg ggc gtt tcc tac cgc ttc ggt cag gaa      576
75 Asp Asn Gly Met Leu Ser Leu Gly Val Ser Tyr Arg Phe Gly Gln Glu
76                      180                      185                      190
78 gat gct gca ccg gtt gtt gct ccg gct ccg gct ccg gct ccg gaa gtg      624
79 Asp Ala Ala Pro Val Val Ala Pro Ala Pro Ala Pro Ala Pro Glu Val
80                      195                      200                      205
82 gct acc aag cac ttc acc ctg aag tct gac gtt ctg ttc aac ttc aac      672
83 Ala Thr Lys His Phe Thr Leu Lys Ser Asp Val Leu Phe Asn Phe Asn
84                      210                      215                      220
86 aaa gct acc ctg aaa ccg gaa ggt cag cag gct ctg gat cag ctg tac      720
87 Lys Ala Thr Leu Lys Pro Glu Gly Gln Gln Ala Leu Asp Gln Leu Tyr
88 225                      230                      235                      240
90 act cag ctg agc aac atg gat ccg aaa gac ggt tcc gct gtt gtt ctg      768
91 Thr Gln Leu Ser Asn Met Asp Pro Lys Asp Gly Ser Ala Val Val Leu
92                      245                      250                      255
94 ggc tac acc gac cgc atc ggt tcc gaa gct tac aac cag cag ctg tct      816
95 Gly Tyr Thr Asp Arg Ile Gly Ser Glu Ala Tyr Asn Gln Gln Leu Ser
96                      260                      265                      270
98 gag aaa cgt gct cag tcc gtc gtt gac tac ctg gtt gct aaa ggc atc      864
99 Glu Lys Arg Ala Gln Ser Val Val Asp Tyr Leu Val Ala Lys Gly Ile
100                      275                      280                      285
102 ccg gct ggc aaa atc tcc gct cgc ggc atg ggt gaa tcc aac ccg gtt      912
103 Pro Ala Gly Lys Ile Ser Ala Arg Gly Met Gly Glu Ser Asn Pro Val
104                      290                      295                      300
106 act ggc aac acc tgt gac aac gtg aaa gct cgc gct gcc ctg atc gat      960
107 Thr Gly Asn Thr Cys Asp Asn Val Lys Ala Arg Ala Ala Leu Ile Asp
108 305                      310                      315                      320
110 tgc ctg gct ccg gat cgt cgt gta gag atc gaa gtt aaa ggc tac aaa      1008
111 Cys Leu Ala Pro Asp Arg Arg Val Glu Ile Glu Val Lys Gly Tyr Lys
112                      325                      330                      335
114 gaa gtt gta act cag cct cag gct      1032
115 Glu Val Val Thr Gln Pro Gln Ala
116                      340

```

192 &lt;210&gt; SEQ ID NO: 3

193 &lt;211&gt; LENGTH: 303

E--&gt; 194 &lt;212&gt; TYPE: ADN

195 &lt;213&gt; ORGANISM: Respiratory Syncytial Virus (RSV)

197 &lt;220&gt; FEATURE:

198 &lt;221&gt; NAME/KEY: CDS

199 &lt;222&gt; LOCATION: (1)..(303)

201 &lt;220&gt; FEATURE:

## RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/647,309

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

202 &lt;223&gt; OTHER INFORMATION: G2A

204 &lt;400&gt; SEQUENCE: 3

```

205 acc gtg aaa acc aaa aac acc acg acc acc cag acc cag ccg agc aaa 48
206 Thr Val Lys Thr Lys Asn Thr Thr Thr Thr Gln Thr Gln Pro Ser Lys
207 1 5 10 15
209 ccg acc acc aaa cag cgt cag aac aaa ccg ccg aac aaa ccg aac aac 96
210 Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Asn Lys Pro Asn Asn
211 20 25 30
213 gat ttc cat ttc gaa gtg ttc aac ttc gtg ccg tgc agc atc tgc agc 144
214 Asp Phe His Phe Glu Val Phe Asn Phe Val Pro Cys Ser Ile Cys Ser
215 35 40 45
217 aac aac ccg acc tgc tgg gcg atc tgc aaa cgt atc ccg aac aaa aaa 192
218 Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys Arg Ile Pro Asn Lys Lys
219 50 55 60
221 ccg ggc aaa aaa acc acg acc aaa ccg acc aaa aaa ccg acc ttc aaa 240
222 Pro Gly Lys Lys Thr Thr Thr Lys Pro Thr Lys Lys Pro Thr Phe Lys
223 65 70 75 80
225 acc acc aaa aaa gat cat aaa ccg cag acc acc aaa ccg aaa gaa gtg 288
226 Thr Thr Lys Lys Asp His Lys Pro Gln Thr Thr Lys Pro Lys Glu Val
227 85 90 95
229 ccg acc acc aaa ccg 303
230 Pro Thr Thr Lys Pro
231 100

```

262 &lt;210&gt; SEQ ID NO: 5

263 &lt;211&gt; LENGTH: 303

E--> 264 <212> TYPE: ADN

265 &lt;213&gt; ORGANISM: Respiratory Syncytial Virus (RSV)

267 &lt;220&gt; FEATURE:

268 &lt;221&gt; NAME/KEY: CDS

269 &lt;222&gt; LOCATION: (1)..(303)

271 &lt;220&gt; FEATURE:

272 &lt;223&gt; OTHER INFORMATION: G2B

274 &lt;400&gt; SEQUENCE: 5

```

275 acc gcg cag acc aaa ggc cgt atc acc acc agc acc cag acc aac aaa 48
276 Thr Ala Gln Thr Lys Gly Arg Ile Thr Thr Ser Thr Gln Thr Asn Lys
277 1 5 10 15
279 ccg agc acc aaa agc cgt agc aaa aac ccg ccg aaa aaa ccg aaa gat 96
280 Pro Ser Thr Lys Ser Arg Ser Lys Asn Pro Pro Lys Lys Pro Lys Asp
281 20 25 30
283 gat tac cac ttc gaa gtg ttc aac ttc gtg ccc tgc agc atc tgc ggc 144
284 Asp Tyr His Phe Glu Val Phe Asn Phe Val Pro Cys Ser Ile Cys Gly
285 35 40 45
287 aac aac cag ctg tgc aaa agc atc tgc aaa acc atc ccg agc aac aaa 192
288 Asn Asn Gln Leu Cys Lys Ser Ile Cys Lys Thr Ile Pro Ser Asn Lys
289 50 55 60
291 ccg aaa aag aaa ccg acc atc aaa ccg acc aac aaa ccg acc acc aaa 240
292 Pro Lys Lys Lys Pro Thr Ile Lys Pro Thr Asn Lys Pro Thr Thr Lys
293 65 70 75 80
295 acc acc aac aaa cgt gat ccg aaa acc ccg gcg aaa atg ccg aag aag 288

```

## RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/647,309

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

296 Thr Thr Asn Lys Arg Asp Pro Lys Thr Pro Ala Lys Met Pro Lys Lys
297                               85                               90                               95
299 gaa atc atc acc aac
300 Glu Ile Ile Thr Asn
301                               100
332 <210> SEQ ID NO: 7
333 <211> LENGTH: 303
E--> 334 <212> TYPE: ADN
335 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
337 <220> FEATURE:
338 <221> NAME/KEY: CDS
339 <222> LOCATION: (1)..(303)
341 <220> FEATURE:
342 <223> OTHER INFORMATION: G2AdCys
345 <400> SEQUENCE: 7
346 acc gtg aaa acc aaa aac acc acg acc acc cag acc cag ccg agc aaa 48
347 Thr Val Lys Thr Lys Asn Thr Thr Thr Gln Thr Gln Pro Ser Lys
348 1 5 10 15
350 ccg acc acc aaa cag cgt cag aac aaa ccg ccg aac aaa ccg aac aac 96
351 Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Asn Lys Pro Asn Asn
352 20 25 30
354 gat ttc cat ttc gaa gtg ttc aac ttc gtg ccg agc agc atc tgc agc 144
355 Asp Phe His Phe Glu Val Phe Asn Phe Val Pro Ser Ser Ile Cys Ser
356 35 40 45
358 aac aac ccg acc tgc tgg gcg atc agc aaa cgt atc ccg aac aaa aaa 192
359 Asn Asn Pro Thr Cys Trp Ala Ile Ser Lys Arg Ile Pro Asn Lys Lys
360 50 55 60
362 ccg ggc aaa aaa acc acg acc aaa ccg acc aaa aaa ccg acc ttc aaa 240
363 Pro Gly Lys Lys Thr Thr Thr Lys Pro Thr Lys Lys Pro Thr Phe Lys
364 65 70 75 80
366 acc acc aaa aaa gat cat aaa ccg cag acc acc aaa ccg aaa gaa gtg 288
367 Thr Thr Lys Lys Asp His Lys Pro Gln Thr Thr Lys Pro Lys Glu Val
368 85 90 95
370 ccg acc acc aaa ccg 303
371 Pro Thr Thr Lys Pro
372 100
403 <210> SEQ ID NO: 9
404 <211> LENGTH: 303
E--> 405 <212> TYPE: ADN
406 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
408 <220> FEATURE:
409 <221> NAME/KEY: CDS
410 <222> LOCATION: (1)..(303)
412 <220> FEATURE:
413 <223> OTHER INFORMATION: G2BdCys
416 <400> SEQUENCE: 9
417 acc gcg cag acc aaa ggc cgt atc acc acc agc acc cag acc aac aaa 48
418 Thr Ala Gln Thr Lys Gly Arg Ile Thr Thr Ser Thr Gln Thr Asn Lys
419 1 5 10 15

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

421 ccg agc acc aaa agc cgt agc aaa aac ccg ccg aaa aaa ccg aaa gat 96
422 Pro Ser Thr Lys Ser Arg Ser Lys Asn Pro Pro Lys Lys Pro Lys Asp
423      20      25      30
425 gat tac cac ttc gaa gtg ttc aac ttc gtg ccc agc agc atc tgc ggc 144
426 Asp Tyr His Phe Glu Val Phe Asn Phe Val Pro Ser Ser Ile Cys Gly
427      35      40      45
429 aac aac cag ctg tgc aaa agc atc agc aaa acc atc ccg agc aac aaa 192
430 Asn Asn Gln Leu Cys Lys Ser Ile Ser Lys Thr Ile Pro Ser Asn Lys
431      50      55      60
433 ccg aaa aag aaa ccg acc atc aaa ccg acc aac aaa ccg acc acc aaa 240
434 Pro Lys Lys Lys Pro Thr Ile Lys Pro Thr Asn Lys Pro Thr Thr Lys
435      65      70      75      80
437 acc acc aac aaa cgt gat ccg aaa acc ccg gcg aaa atg ccg aag aag 288
438 Thr Thr Asn Lys Arg Asp Pro Lys Thr Pro Ala Lys Met Pro Lys Lys
439      85      90      95
441 gaa atc atc acc aac 303
442 Glu Ile Ile Thr Asn
443      100
474 <210> SEQ ID NO: 11
475 <211> LENGTH: 42
E--> 476 <212> TYPE: ADN
477 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
479 <220> FEATURE:
480 <221> NAME/KEY: CDS
481 <222> LOCATION: (1)..(42)
483 <220> FEATURE:
484 <223> OTHER INFORMATION: G1ACys
487 <400> SEQUENCE: 11
488 agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa 42
489 Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys
490      1      5      10
503 <210> SEQ ID NO: 13
504 <211> LENGTH: 42
E--> 505 <212> TYPE: ADN
506 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
508 <220> FEATURE:
509 <221> NAME/KEY: CDS
510 <222> LOCATION: (1)..(42)
512 <220> FEATURE:
513 <223> OTHER INFORMATION: G1BCys
517 <400> SEQUENCE: 13
518 agc atc tgc ggc aac aac cag ctg tgc aaa agc atc tgc aaa 42
519 Ser Ile Cys Gly Asn Asn Gln Leu Cys Lys Ser Ile Cys Lys
520      1      5      10
533 <210> SEQ ID NO: 15
534 <211> LENGTH: 42
E--> 535 <212> TYPE: ADN
536 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
538 <220> FEATURE:

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

539 <221> NAME/KEY: CDS
540 <222> LOCATION: (1)..(42)
542 <220> FEATURE:
543 <223> OTHER INFORMATION: G1A
546 <400> SEQUENCE: 15
547 agc atc tgc agc aac aac ccg acc tgc tgg gcg atc agc aaa      42
548 Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Ser Lys
549   1           5           10
562 <210> SEQ ID NO: 17
563 <211> LENGTH: 42
E--> 564 <212> TYPE: (ADN)
565 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
567 <220> FEATURE:
568 <221> NAME/KEY: CDS
569 <222> LOCATION: (1)..(42)
571 <220> FEATURE:
572 <223> OTHER INFORMATION: G1B
575 <400> SEQUENCE: 17
576 agc atc tgc ggc aac aac cag ctg tgc aaa agc atc agc aaa      42
577 Ser Ile Cys Gly Asn Asn Gln Leu Cys Lys Ser Ile Ser Lys
578   1           5           10
659 <210> SEQ ID NO: 23
660 <211> LENGTH: 303
E--> 661 <212> TYPE: (ADN)
662 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
664 <220> FEATURE:
665 <221> NAME/KEY: CDS
666 <222> LOCATION: (1)..(303)
668 <220> FEATURE:
669 <223> OTHER INFORMATION: G2AdCF
672 <400> SEQUENCE: 23
673 acc gtg aaa acc aaa aac acc acg acc acc cag acc cag ccg agc aaa      48
674 Thr Val Lys Thr Lys Asn Thr Thr Thr Gln Thr Gln Pro Ser Lys
675   1           5           10           15
677 ccg acc acc aaa cag cgt cag aac aaa ccg ccg aac aaa ccg aac aac      96
678 Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Asn Lys Pro Asn Asn
679           20           25           30
681 gat tcc cat tcc gaa gtg tcc aac tcc gtg ccg agc agc atc tgc agc      144
682 Asp Ser His Ser Glu Val Ser Asn Ser Val Pro Ser Ser Ile Cys Ser
683           35           40           45
685 aac aac ccg acc tgc tgg gcg atc agc aaa cgt atc ccg aac aaa aaa      192
686 Asn Asn Pro Thr Cys Trp Ala Ile Ser Lys Arg Ile Pro Asn Lys Lys
687           50           55           60
689 ccg ggc aaa aaa acc acg acc aaa ccg acc aaa aaa ccg acc ttc aaa      240
690 Pro Gly Lys Lys Thr Thr Thr Lys Pro Thr Lys Lys Pro Thr Phe Lys
691   65           70           75           80
693 acc acc aaa aaa gat cat aaa ccg cag acc acc aaa ccg aaa gaa gtg      288
694 Thr Thr Lys Lys Asp His Lys Pro Gln Thr Thr Lys Pro Lys Glu Val
695           85           90           95

```



## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

697 ccg acc acc aaa ccg 303
698 Pro Thr Thr Lys Pro
699 100
730 <210> SEQ ID NO: 25
731 <211> LENGTH: 51
E--> 732 <212> TYPE: ADN
733 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
735 <220> FEATURE:
736 <221> NAME/KEY: CDS
737 <222> LOCATION: (1)..(51)
739 <220> FEATURE:
740 <223> OTHER INFORMATION: G4A
742 <400> SEQUENCE: 25
743 gtg ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc 48
744 Val Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys
745 1 5 10 15
747 aaa 51
748 Lys
764 <210> SEQ ID NO: 27
765 <211> LENGTH: 51
E--> 766 <212> TYPE: ADN
767 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
769 <220> FEATURE:
770 <221> NAME/KEY: CDS
771 <222> LOCATION: (1)..(51)
773 <220> FEATURE:
774 <223> OTHER INFORMATION: G4AdC
777 <400> SEQUENCE: 27
778 gtg ccg agc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc agc 48
779 Val Pro Ser Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Ser
780 1 5 10 15
782 aaa 51
783 Lys
799 <210> SEQ ID NO: 29
800 <211> LENGTH: 51
E--> 801 <212> TYPE: ADN
802 <213> ORGANISM: Respiratory Syncytial Virus (RSV)
804 <220> FEATURE:
805 <221> NAME/KEY: CDS
806 <222> LOCATION: (1)..(51)
808 <220> FEATURE:
809 <223> OTHER INFORMATION: G4B
812 <400> SEQUENCE: 29
813 gtg ccc tgc agc atc tgc ggc aac aac cag ctg tgc aaa agc atc tgc 48
814 Val Pro Cys Ser Ile Cys Gly Asn Asn Gln Leu Cys Lys Ser Ile Cys
815 1 5 10 15
817 aaa 51
818 Lys
834 <210> SEQ ID NO: 31

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

835 <211> LENGTH: 51
E--> 836 <212> TYPE: ADN
837 <213> ORGANISM: Respiratory syncytial Virus (RSV)
839 <220> FEATURE:
840 <221> NAME/KEY: CDS
841 <222> LOCATION: (1)..(51)
843 <220> FEATURE:
844 <223> OTHER INFORMATION: G4BdC
847 <400> SEQUENCE: 31
848 gtg ccc agc agc atc tgc ggc aac aac cag ctg tgc aaa agc atc agc   48
849 Val Pro Ser Ser Ile Cys Gly Asn Asn Gln Leu Cys Lys Ser Ile Ser
850   1                      5                      10                      15
852 aaa                                                                51
853 Lys
949 <210> SEQ ID NO: 37
950 <211> LENGTH: 183
E--> 951 <212> TYPE: ADN
952 <213> ORGANISM: Respiratory syncytial Virus (RSV)
954 <220> FEATURE:
955 <221> NAME/KEY: CDS
956 <222> LOCATION: (1)..(183)
958 <220> FEATURE:
959 <223> OTHER INFORMATION: G200A
962 <400> SEQUENCE: 37
963 cag acc cag ccg agc aaa ccg acc acc aaa cag cgt cag aac aaa ccg   48
964 Gln Thr Gln Pro Ser Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro
965   1                      5                      10                      15
967 ccg aac aaa ccg aac aac gat ttc cat ttc gaa gtg ttc aac ttc gtg   96
968 Pro Asn Lys Pro Asn Asn Asp Phe His Phe Glu Val Phe Asn Phe Val
969           20                      25                      30
971 ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa   144
972 Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys
973           35                      40                      45
975 cgt atc ccg aac aaa aaa ccg ggc aaa aaa acc acg acc               183
976 Arg Ile Pro Asn Lys Lys Pro Gly Lys Lys Thr Thr Thr
977   50                      55                      60
999 <210> SEQ ID NO: 39
1000 <211> LENGTH: 177
E--> 1001 <212> TYPE: ADN
1002 <213> ORGANISM: Respiratory syncytial Virus (RSV)
1004 <220> FEATURE:
1005 <221> NAME/KEY: CDS
1006 <222> LOCATION: (1)..(177)
1008 <220> FEATURE:
1009 <223> OTHER INFORMATION: G198A
1012 <400> SEQUENCE: 39
1013 cag acc cag ccg agc aaa ccg acc acc aaa cag cgt cag aac aaa ccg   48
1014 Gln Thr Gln Pro Ser Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro
1015   1                      5                      10                      15

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

1017 ccg aac aaa ccg aac aac gat ttc cat ttc gaa gtg ttc aac ttc gtg 96
1018 Pro Asn Lys Pro Asn Asn Asp Phe His Phe Glu Val Phe Asn Phe Val
1019          20          25          30
1021 ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa 144
1022 Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys
1023          35          40          45
1025 cgt atc ccg aac aaa aaa ccg ggc aaa aaa acc 177
1026 Arg Ile Pro Asn Lys Lys Pro Gly Lys Lys Thr
1027          50          55
1049 <210> SEQ ID NO: 41
1050 <211> LENGTH: 171
E--> 1051 <212> TYPE: ADN
1052 <213> ORGANISM: Respiratory syncytial Virus (RSV)
1054 <220> FEATURE:
1055 <221> NAME/KEY: CDS
1056 <222> LOCATION: (1)..(171)
1058 <220> FEATURE:
1059 <223> OTHER INFORMATION: G196A
1062 <400> SEQUENCE: 41
1063 cag acc cag ccg agc aaa ccg acc acc aaa cag cgt cag aac aaa ccg 48
1064 Gln Thr Gln Pro Ser Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro
1065 1          5          10          15
1067 ccg aac aaa ccg aac aac gat ttc cat ttc gaa gtg ttc aac ttc gtg 96
1068 Pro Asn Lys Pro Asn Asn Asp Phe His Phe Glu Val Phe Asn Phe Val
1069          20          25          30
1071 ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa 144
1072 Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys
1073          35          40          45
1075 cgt atc ccg aac aaa aaa ccg ggc aaa 171
1076 Arg Ile Pro Asn Lys Lys Pro Gly Lys
1077          50          55
1099 <210> SEQ ID NO: 43
1100 <211> LENGTH: 165
E--> 1101 <212> TYPE: ADN
1102 <213> ORGANISM: Respiratory syncytial Virus (RSV)
1104 <220> FEATURE:
1105 <221> NAME/KEY: CDS
1106 <222> LOCATION: (1)..(165)
1108 <220> FEATURE:
1109 <223> OTHER INFORMATION: G194A
1112 <400> SEQUENCE: 43
1113 cag acc cag ccg agc aaa ccg acc acc aaa cag cgt cag aac aaa ccg 48
1114 Gln Thr Gln Pro Ser Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro
1115 1          5          10          15
1117 ccg aac aaa ccg aac aac gat ttc cat ttc gaa gtg ttc aac ttc gtg 96
1118 Pro Asn Lys Pro Asn Asn Asp Phe His Phe Glu Val Phe Asn Phe Val
1119          20          25          30
1121 ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa 144
1122 Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys

```

## RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/647,309

TIME: 11:26:48

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

```

1123          35          40          45
1125 cgt atc ccg aac aaa aaa ccg          165
1126 Arg Ile Pro Asn Lys Lys Pro
1127          50          55
1149 <210> SEQ ID NO: 45
1150 <211> LENGTH: 159
E--> 1151 <212> TYPE: ADN
1152 <213> ORGANISM: Respiratory syncytial Virus (RSV)
1154 <220> FEATURE:
1155 <221> NAME/KEY: CDS
1156 <222> LOCATION: (1)..(159)
1158 <220> FEATURE:
1159 <223> OTHER INFORMATION: G192A
1162 <400> SEQUENCE: 45
1163 cag acc cag ccg agc aaa ccg acc acc aaa cag cgt cag aac aaa ccg          48
1164 Gln Thr Gln Pro Ser Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro
1165 1          5          10          15
1167 ccg aac aaa ccg aac aac gat ttc cat ttc gaa gtg ttc aac ttc gtg          96
1168 Pro Asn Lys Pro Asn Asn Asp Phe His Phe Glu Val Phe Asn Phe Val
1169          20          25          30
1171 ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa          144
1172 Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys
1173          35          40          45
1175 cgt atc ccg aac aaa          159
1176 Arg Ile Pro Asn Lys
1177          50
1199 <210> SEQ ID NO: 47
1200 <211> LENGTH: 153
E--> 1201 <212> TYPE: ADN
1202 <213> ORGANISM: Respiratory syncytial Virus (RSV)
1204 <220> FEATURE:
1205 <221> NAME/KEY: CDS
1206 <222> LOCATION: (1)..(153)
1208 <220> FEATURE:
1209 <223> OTHER INFORMATION: G6A
1212 <400> SEQUENCE: 47
1213 cag acc cag ccg agc aaa ccg acc acc aaa cag cgt cag aac aaa ccg          48
1214 Gln Thr Gln Pro Ser Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro
1215 1          5          10          15
1217 ccg aac aaa ccg aac aac gat ttc cat ttc gaa gtg ttc aac ttc gtg          96
1218 Pro Asn Lys Pro Asn Asn Asp Phe His Phe Glu Val Phe Asn Phe Val
1219          20          25          30
1221 ccg tgc agc atc tgc agc aac aac ccg acc tgc tgg gcg atc tgc aaa          144
1222 Pro Cys Ser Ile Cys Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys
1223          35          40          45
1225 cgt atc ccg          153
1226 Arg Ile Pro
1227          50
3327 <210> SEQ ID NO: 136

```

P. 11

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:49

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

3328 <211> LENGTH: 15  
3329 <212> TYPE: PRT  
3330 <213> ORGANISM: Respiratory syncytial Virus (RSV)  
3332 <220> FEATURE:  
3333 <223> OTHER INFORMATION: Xaa means orn.  
3335 <220> FEATURE:  
3336 <223> OTHER INFORMATION: G1'  
3339 <400> SEQUENCE: 136  
W--> 3340 Ser Ile Asp Ser Asn Asn Pro Thr Xaa Trp Ala Ile Ser Lys Cys  
3341 1 5 10 15  
E--> 3345 1  
E--> 3348 -16-  
E--> 3349 PF82PCTSEQ/dln

*delete*

see next page

<210> 79  
<211> 183  
<212> ADN  
<213> Respiratory syncytial Virus (RSV)

<220>  
<221> CDS  
<222> (1)..(183)

<220> G200BdC *move down - <220> never has a response*  
<223> ↓

FYI

Use of n and/or Xaa has been detected in the Sequence Listing.  
Review the Sequence Listing to insure a corresponding  
explanation is presented in the <220> to <223> fields of  
each sequence using n or Xaa.

# VERIFICATION SUMMARY

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:50

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number  
 L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
 L:21 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:194 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:264 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:334 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:405 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:476 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:505 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:535 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:564 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:604 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:19  
 L:604 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:19  
 L:604 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
 L:621 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:20  
 L:621 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:20  
 L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20  
 L:638 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:21  
 L:638 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:21  
 L:638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
 L:655 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:22  
 L:655 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:22  
 L:655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
 L:661 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:732 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:766 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:801 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:836 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:882 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:33  
 L:882 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:33  
 L:882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
 L:902 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:34  
 L:902 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:34  
 L:902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
 L:922 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:35  
 L:922 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:35  
 L:922 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
 L:942 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:36  
 L:942 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:36  
 L:942 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36  
 L:951 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1001 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1051 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1101 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1151 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1201 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1251 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
 L:1293 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:

# VERIFICATION SUMMARY

PATENT APPLICATION: US/09/647,309

DATE: 12/06/2001

TIME: 11:26:50

Input Set : A:\es.txt

Output Set: N:\CRF3\12062001\I647309.raw

L:1342 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1392 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1442 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1491 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1541 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1591 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1633 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1683 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1733 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1783 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1833 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1883 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1933 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1975 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:1982 M:256 W: Invalid Numeric Header Field, <220> has non-blank data  
L:2025 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2075 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2125 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2175 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2225 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2275 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2325 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2367 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2438 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2509 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2559 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2609 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2659 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:2709 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:  
L:3224 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:129  
L:3224 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:129  
L:3224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129  
L:3244 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:130  
L:3244 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:130  
L:3244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:130  
L:3323 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:135  
L:3323 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:135  
L:3323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135  
L:3340 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:136  
L:3340 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:136  
L:3340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136  
L:3345 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:136  
M:332 Repeated in SeqNo=136  
L:3349 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
L:3349 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1  
L:3349 M:252 E: No. of Seq. differs, <211>LENGTH:Input:15 Found:16 SEQ:136